NOTE AND COMMENT.

We hope to be able to issue the April number of *The New Philosophy* on time, with announcements of the time and place and propramme of the annual meeting of the Swedenborg Scientific Association.

A monograph by Miss Lillian Beekman on *Spectrum Analysis and Swedenborg's Principia* comes to hand in time for brief notice. One of the unsolved problems of modern scientific research is "Why should spectrum analysis indicate only metallic lines, when the planets, assumed to be formed from the sun by centrifugal expulsion, have so large a proportion of non-metallic substances?" The fact before it had become a problem came within the perview of Swedenborg, who in his *Principia* anticipated the report of the Spectroscope as to the large metallic element in the immediate vicinity of the sun.

In the doctrine of the *Principia* a definite statement is made, which was unsupported by any consent of the scientific workers of his time, or by the experimental data since brought forth until very recently. It is precisely this point and particular statement which modern spectrum analysis has verified as if it had gone out to hunt evidence. The new facts, set forth and connected with the doctrine of creation in the *Principia*, and illustrated for the non-scientific New Churchman, is the scope of this pamphlet. It is just such a study as the average New Churchman, who aspires to some understanding of Swedenborg's scientific and philosophical works, needs for his guide. We hope to welcome many such commentaries. Miss Beekman has rare perception into the system of Swedenborg and an equally rare faculty of finding and collating with his teaching what is new and unexplained in recent science. The price of the handsomely printed pamphlet is one dollar, which the few who have interest in such studies will gladly contribute in aid of them.

In the endeavor to explain the acts of absorption, secretion and elimination by purely chemical and physical laws, the physiologist has met with one serious obstacle, namely, the existence of the so-called "vital selection" in the cells primarily engaged in these operations. Take, for example, the passing over of the products of digestion into the lacteals and venous circulation of the abdomen. This for a long time was accounted for entirely by the phenomenon of osmosis, or the diffusion of certain substances in solution through an animal membrane; also, the function of glands in the body, such as the salivary gland and emunctory organs, such as the kidneys, which was explained by the processes of filtration and inbibition. But experiments in recent years have shown that the above explanations are not suffi-

cient. The fact that these operations continue even under conditions usually considered inhibitory of either osmosis or filtration, as well as in the unerring accuracy displayed in accepting or rejecting certain substances to the exclusion of others, head the list of positive evidence against the merely physical theory and indicate beyond a doubt that there is a specific activity due to some inherent power in the cell itself. For the want of a "scientific" explanation of this activity, the physiologist calls it "vital selection," just as the wily physician quiets the inquisitive patient whose case he fails to understand by vague and learned remarks about the liver!

But just such evidence as the above has given rise to the modern school of vitalism, whose doctrines, although they fail to meet the true issue, are, nevertheless, a step in advance of radical materialism, since they acknowledge that there is something beyond the ken of the senses, that there is a life-force operative from within. But, after all, Swedenborg offers the only rational solution of this all-absorbing problem. Writing more than a hundred years ago, he advanced theories and ideas which the vitalists have but just begun to dream about, and which they can never hope to fully grasp without the aid of his teachings. His doctrine of *use* is especially applicable in this case. It is an axiom of the true Philosophy that all things in the universe, from the sun itself down to the smallest grain of sand, were created for use. Especially is this true of the human body, the most perfect mechanism for the performance of use that can possibly be conceived of,—it is use itself ultimated in concrete form. So every part of it, even the most minute, has some individual use to perform conducive to the maintenance and operation of the whole, and the elements of nutrition needed by each correspond in essence and in form to that particular use. By this correspondence, this *affinity in use,* they are attracted, drawn in, selected, either from the richly laden atmosphere, the conglomerate mass of chyme in the digestive canal, or from the complex stream of arterial blood,—thus, either from the elaboration of the animal spirit and more subtle fluids, or for the replenishment of the blood; attracted, either, by the body as a whole or by its respective parts. Hence it is that the lacteals, terminating in the intestinal villi, take up chiefly emulsified fats, while the venous capillaries drink in the sugars and proteid matter; that the eye selects the pure materials for its exquisitely transparent humors, and leaves beyond everything that would tend to obstruct the incoming rays of light; that the kidneys draw off from the aorta only that portion of the arterial blood which is contaminated with impure serum, allowing the rest to pass swiftly by. Swedenborg does not limit the power of selection to the cell alone, but shows that each organ or part possesses the same in a larger degree and rules supreme within its own domain.

For a further study of this subject, the reader is referred to the *Animal Kingdom.*

HARVEY FARRINGTON.

The Swedenborg Philosophy Club, Chicago, has this winter converted itself into strictly a student class bent on earnest and sincere work under the able and inspiring leadership of Prof. Mann, who is both President and Director of Study. Incidentally it performs another use, by no means small, in giving opportunity for earnest men, loving the larger aims of life, to come into mutual touch, understanding and helpfulness.

At Prof. Mann's suggestion, Swedenborg's *Economy of the Animal Kingdom* was selected as the first text-book, because it treats particularly of the formation and operation of the threefold blood; for the blood from its presence and functional activity in all the organs of the body may properly be called the universal organ of the corporeal system, as it is the immediate liquid organ of life itself upon its several planes. A study of the blood, then, in its threefold constitution and in the field of its successive and simultaneous uses touches centrally upon all the operations of the bodily organs, and thus seems fundamental to any interior understanding of them in their place and function. This also introduces to the study of the Auras.

The method of study is simple and direct. The leader assigns a due portion for home study and thought. At the next class, the Professor sums up the salient points with elucidative comment from data of modern science belonging to his immediate department. The physicians of the class come prepared to give a summary of general practical data from their department; adding thereto anything confirmatory or illustrative of points at issue.

Then the questions of individual members are presented for common consideration, in which, perhaps, is gained a closer knowledge of each other's mind, range of thought and quality of heart and purpose, and thus of the possible place of use for each in the work,—than could be gained by any other means.

Afterwards follows a discussion of the subject matter from the ground of its relations with other things, or the entire domain of its uses; for in all creation it is in its uses alone that the true nature of anything is unfolded, and by its uses only can it be fully elucidated. In this part of the study, the entire library of Swedenborg's works is laid under contribution, to which the further answer of unsolved questions are referred, without prejudgment, each student watching out meanwhile for anything which may meet his neighbor's need or pleasure as well as his own.

The work done is simple and direct. There is a distinct purpose to dispose ourselves to the study, so that we may be able to receive the true student's enlightenments and delights.